

Rec'd PCT/PTO 25 JUN 2004

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
10 July 2003 (10.07.2003)

PCT

(10) International Publication Number
WO 03/055645 A1

(51) International Patent Classification⁷: B24C 9/00

(21) International Application Number: PCT/SG02/00296

(22) International Filing Date:
27 December 2002 (27.12.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
200108107-4 28 December 2001 (28.12.2001) SG

(71) Applicant (for all designated States except US): JETSIS
INTERNATIONAL PTE LTD [SG/SG]; 17 Hwa Yew
Industrial Building, Mandai Estate, #06-1B, Singapore
729934 (SG).

(72) Inventor; and

(75) Inventor/Applicant (for US only): GADD, Michael,
William [GB/SG]; Blk 171, Bukit Batok West Avenue 8,
#20-355, Singapore 650171 (SG).

(74) Agent: DREW & NAPIER LLC; 20 Raffles Place,
#17-00, Ocean Towers, Singapore 048620 (SG).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE,
SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VC, VN, YU, ZA, ZM, ZW.

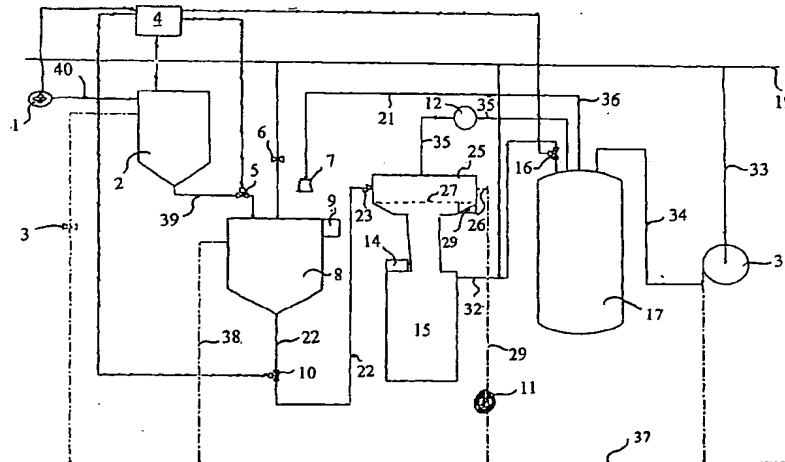
(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK,
TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND APPARATUS FOR ABRASIVE RECYCLING AND WASTE SEPARATION SYSTEM



(57) Abstract: The present invention provides a method of handling abrasive solids materials used in an abrasive cutting procedure which jets a high-pressure abrasive slurry through a nozzle (7) onto a work piece over and/or in a catcher tank (8). This handling method includes catching the used abrasive slurry together with work piece kerf material in the catcher tank, and passing at least some abrasive solids collected in the catcher tank as a slurry to a partitioning apparatus which includes a vibratory sieve (27). The handling method also includes partitioning the slurry with the partitioning apparatus in order to provide at least two solids streams. One of the solid streams passes through the sieve and the other passes across the sieve whilst entrained as a slurry. The handling method further includes passing as a slurry to the nozzle (7) for jetting a pressurised or pressurisable slurry that has partitioned solids stream which has passed through the sieve (27).

EV372458275